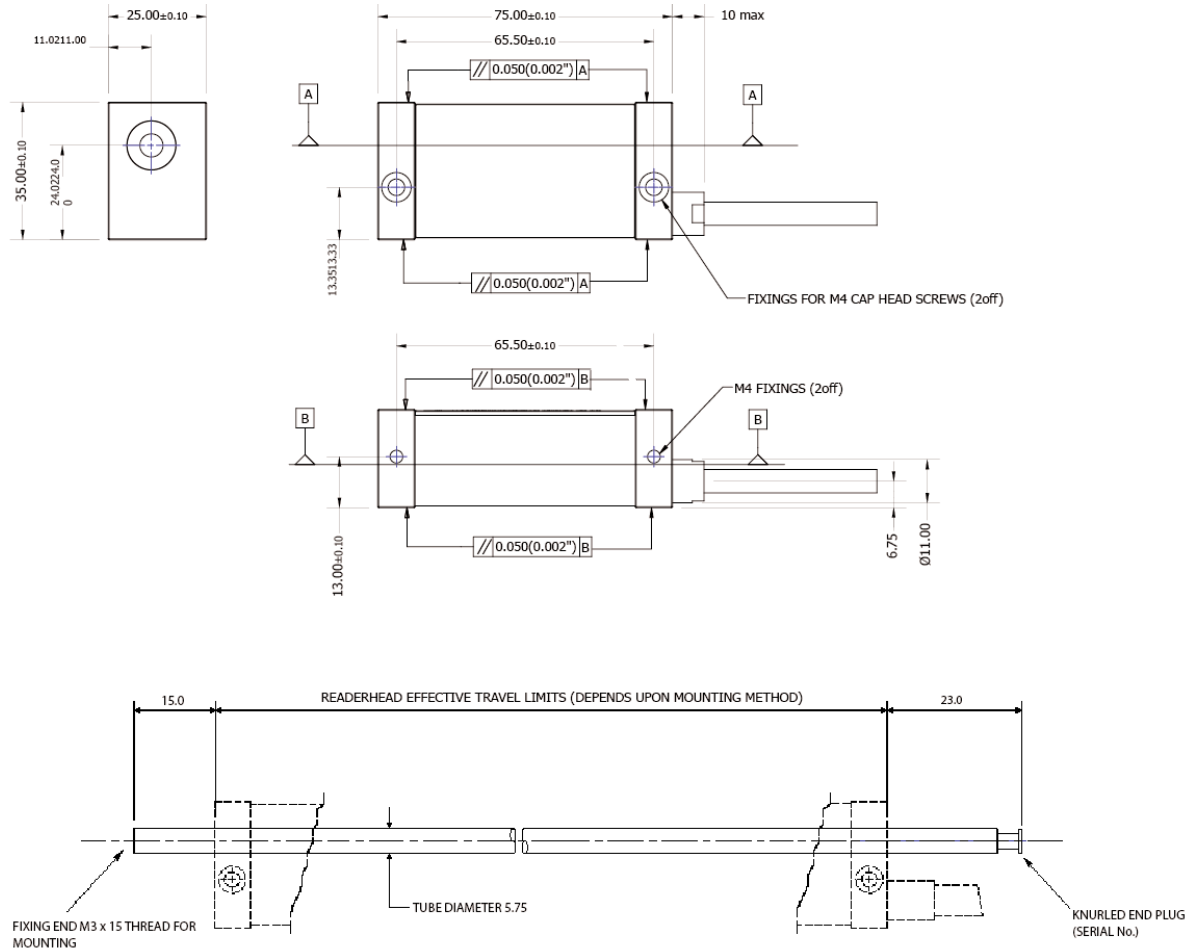


Newall's DMG linear encoders were specifically designed to be used with competitive brands of DRO displays. Now you can replace your glass scales with Newall's reliable inductive encoders that are impervious to coolant, oil, dirt, and other environmental conditions. DMG series encoders are compatible with most DRO displays, including Acu-Rite, Anilam, Fagor, Heidenhain, Mitutoyo, and Sargon. The complete compatibility list can be viewed at www.newall.com/PDFs/downloads_led_promo_digcompat-displays.pdf

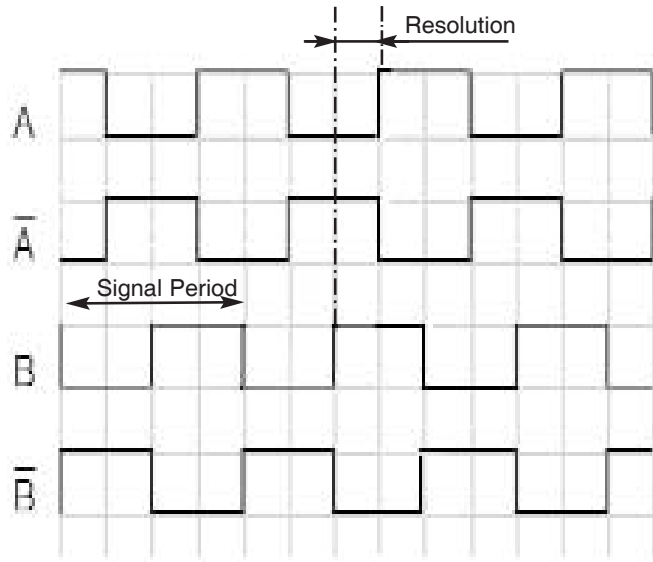


Type	Inductive	Maximum scale travel	1000mm (40 in.)
Output signal	TTL, 1Vpp & 11µApp	Maximum single end mount measuring length	250mm (10 in)
Accuracy grade (µm/m)	+/-5 (+/-0.0002 in)	Scale over-travel requirements	173mm (7 in)
Resolutions (µm)	1, 2, 5, 10	Cable	9 core screened cable with PUR (polyurethane) cover with armour
Signal Period (1Vpp or 11µApp)	20µm or 40µm	Cable length	3.5m
Reference type	None	Minimum bend radius with PUR	50.8mm (2in)
Maximum traverse rate	1MHz (1m/s at 1µm resolution)	Maximum cable length	20m (787 in)
Maximum Acc. / Dec.	10g / 98m/s (head moving)	Connector	D type 9 pin, 12 pin Round, 9 pin Round
Power supply	5VDC +/- 5% < 80mA	EMC compliance	BS EN 61000-6-4 & BS EN 61000-6-2
Shock (11ms)	100g / 980m/s ² (IEC 69-2-6)		
Vibration (55-2000Hz)	30g / 294m/s ² (IEC 68-2-27)		
Ingress protection level	IP67 (Exceeds NEMA 6)		
Operating temperature range	0 to 55°C (32 to 131°F)		
Storage temperature range	-20 to 70°C (-4 to 158°F)		
Overall cross-section	35 x 25mm (1.4 x 1in)		
Scale material	Carbon Fibre		
Co-efficient of expansion	12ppm/°C		
Scale OD	5.75mm (0.2 in)		

DMG-TT - TTL Output Signal - Differential Quadrature

Newall TT Series Linear Encoders provide a differential quadrature output at RS422 TTL levels. The output signals are transmitted via 9-core cable.

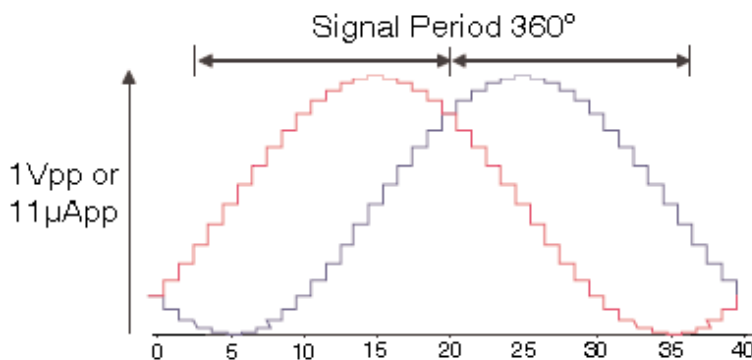
The distance between two successive edges of the combined pulse trains A and B is one measuring step (resolution).



DMG-EV (1Vpp) & DMG-EM (11µApp)

Newall DMG-EV & DMG-EM Series linear encoders provide differential sinusoidal output signals that are phase shifted by 90°, and can provide 1Vpp or 11µApp signal levels depending on which model is selected.

An SVV converter module is provided with DMG-EV. An SVM converter module is provided with DMG-EM.



1Vpp is available with 20µm signal period only

11µApp is available with 20µm or 40µm signal period

Assumes 120 Ohm termination resistor